

Center workers cited for innovative research

AMRDEC Release

REDSTONE ARSENAL, Ala. (Aug. 20, 2010) – Members of the Aviation and Missile Research Development and Engineering Center were among the recipients of the 2010 achievement awards for Army Small Business Innovative Research.

AMRDEC's winners included Dr. Robin Buckelew, director of Weapons Development and Integration Directorate; Dawn Gratz and Otho Thomas Jr., SBIR program coordinators; Dr. Bruce Moylan, technical monitor; Andy Eiermann, contracting officer; and Celeste Hogan, contracting specialist.

The Army conducts an annual awards program to recognize SBIR Phase II efforts

which exemplify the SBIR goal of bringing innovative technologies and products to the workplace.

Award winners are selected based on four criteria: originality and innovation of research; relevance of the research to the Army mission; immediate commercialization potential of the research, reflecting the primary goal of bringing technology and products to the marketplace; and overall quality performance of the project.

Moylan, of the Weapons Development and Integration Directorate, initially submitted the SBIR topic titled "Missile Flight Weather Encounter Software for Sys-



TOP ACHIEVERS-- The 2010 Army Small Business Innovative Research Achievement Award winners from AMRDEC include, from left, Otho Thomas Jr., Dr. Bruce Moylan, Dr. Robin Buckelew, Andy Eiermann and Celeste Hogan. Not pictured is Dawn Gratz.

tem Requirements Development.” CFD Research Corporation submitted the winning SBIR Phase II proposal for the Moylan’s topic. Sami Habchi, executive vice president; and Shawn Ericson, group leader of the Defense Application Branch, received the achievement awards for their work with Moylan.

“Operation of missiles and weapons systems’ platforms in adverse weather has always been an issue,” Buckelew said. “At high speeds, raindrop collisions have effects similar to small projectiles. Dr. Moylan’s tool will enable accurate prediction of total environmental exposure for weapons and platforms during their requirements development and design phases.”

Changing weather scenarios during the weapons systems’ design phase will enable the testing phase to move faster and be less costly.

“This global weather tool, integrated with other software packages for trajectory, electrical, aerothermal, and structural simulations, will significantly advance the understanding of high-speed flight through adverse weather,” Moylan said. “This tool allows us to plan ground tests which are mapped to the statistical flight environment, and to perform high-fidelity flight predictions of the system performance for a host of possible weather scenarios. The emerging approach to system requirement validation for weather has the potential to revolutionize the way all DoD flight systems are ground tested for robustness in non-ideal flight environments.”

The Army is the only federal agency to hold an awards program for small business innovation research; and the program is competitive. This year, 27 out of 471 projects were forwarded to the selection committee and only 11 were chosen for the achievement award.